



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

ROY COOPER
GOVERNOR

J. ERIC BOYETTE
SECRETARY

June 19, 2023

MEMORANDUM TO: All Holders of January, 2024 Edition of the Roadway Standard Drawings Book

FROM: R.E. Davenport, Jr., PE
State Contract Officer DocuSigned by:
Ronald E. Davenport
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SUBJECT: New and Revised Standard Drawings

This memo informs all holders of revisions made for the January 2024 edition of the Roadway Standard Drawings. The new edition will be effective with the January 2024 letting.

Listed below are new standard drawings and standard drawings that have been deleted or revised since the January 2018 edition of the Roadway Standard Drawings.

PLEASE NOTE: THE ROADWAY STANDARD DRAWINGS HAVE UNDERGONE SIGNIFICANT REVISIONS, REDESIGNS, AND UPDATES. WHILE EVERY ATTEMPT WAS MADE TO CAPTURE ALL CHANGES IN THIS MEMO, IT IS STRONGLY ADVISED YOU THOROUGHLY REVIEW AND FAMILIARIZE YOURSELF WITH ALL UPDATES AND MODIFICATIONS.

NEW STANDARDS:

<u>STANDARD DRAWING</u>	<u>SHEETS</u>	<u>TITLE</u>
200.03	2	METHOD OF CLEARING (New Sheet 2 added)
423.03	2	BRIDGE APPROACH FILLS - TYPE 2 APPROACH FILL; APPROACH FILL FOR BRIDGE ABUTMENT WITH MSE WALL
423.04	3	BRIDGE APPROACH FILLS - TYPE 2A APPROACH FILL; ALTERNATE APPROACH FILL FOR INTEGRAL BRIDGE ABUTMENT WITH MSE WALL
815.02	3	SUBSURFACE DRAIN (New Sheets 2 and 3 added)
840.39	1	STEEL GRATE AND FRAME - BICYCLE SAFE

840.55	1	MANHOLE FRAME AND COVER (FLUSH WITH SLAB FOR OPEN THROAT CATCH BASIN)
848.06	13	CURB RAMP (New Sheets 6 thru 12 added)
848.07	1	CONCRETE SIDEPATH / SHARED USE PATH / GREENWAY CONSRUCTION
850.10	2	GUIDE FOR BERM DRAINAGE OUTLET, 15" AND 18" OPEN END PIPE INLET (New Sheet 2 added)
850.11	2	GUIDE FOR BERM DRAINAGE OUTLET, 24" AND 30" OPEN END PIPE INLET (New Sheet 2 added)
852.07	1	MEDIAN CURB FOR TRAFFIC BEARING GRATED DROP INLET (FOR USE WITH 2'-9" CURB AND GUTTER
854.06	2	MEDIAN HAZARD PROTECTION
854.07	1	SINGLE SLOPE CONCRETE BARRIER
862.01	15	GUARDRAIL PLACEMENT (New Sheets 10, 13, 14, and 15 added)
862.02	9	GUARDRAIL INSTALLATION (New Sheet 2 added)
862.03	9	STRUCTURES ANCHOR UNITS (New Sheets 8 and 9 added)
866.02	4	WOVEN WIRE FENCE WITH WOOD POST (New Sheet 4 added)
866.06	1	CHAIN LINK FENCE ON RETAINING WALL
866.07	3	WILDLIFE FENCE WITH CHAIN LINK
866.08	3	WILDLIFE FENCE FOR ROCKY SOILS WITH CHAIN LINK
867.01	1	STEEL PIPE GATE
867.02	1	STEEL BOLLARDS
902.10	1	FOUNDATIONS FOR GROUND MOUNTED SIGNS
1101.02	19	TEMPORARY LANE CLOSURES (New Sheets 9, 12, 13, 18 and 19 added)
1101.04	2	TEMPORARY SHOULDER CLOSURES (New Sheet 2 added)

1170.01	7	PORTABLE CONCRETE BARRIER - MASH APPROVED F-SHAPE K-WALL (New Sheets 1 through 6 added)
1205.07	2	PAVEMENT MARKINGS - HI VISIBILITY CROSS- WALKS NO-TRACK MARKING GUIDANCE (New Sheet 2 added)
1205.16	9	BICYCLE FACILITIES
1205.17	1	PAVEMENT MARKINGS – SIDE-BY-SIDE / ADJACENT ON / OFF RAMPS PAVEMENT MARKING LANE TREATMENT
1630.07	1	SKIMMER BASIN WITH BAFFLES
1630.08	1	TIERED SKIMMER BASIN WITH BAFFLES
1630.09	1	EARTHEN DAM WITH SKIMMER
1633.03	1	TEMPORARY ROCK SILT CHECK TYPE A WITH EXCELSIOR MATTING AND FLOCCULANT
1636.01	1	WATTLE CHECK
1636.02	1	SILT FENCE WITH WATTLE BREAK
1636.03	1	WATTLE BARRIER
1700.01	3	ELECTRICAL SERVICE OPTIONS – SERVICE DISCONNECT WITHOUT MAIN BREAKER (New Sheet 3 added)

REVISED / DELETED STANDARDS:

MINOR CORRECTIONS THAT DO NOT AFFECT THE SCOPE OR MEANING OF THE R.S.D. ARE NOT LISTED, SUCH AS MISPELLING OR PUNCTUATION ERRORS.

<u>STANDARD DRAWING</u>	<u>SHEETS</u>	<u>TITLE</u>
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DIVISION 2 -

200.03	2	<u>METHOD OF CLEARING – METHOD III</u>
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SHEET 1 –

1. Changed sheet number to “1 of 2” to reflect new sheet added.

- 225.01** **1** **GUIDE FOR GRADING SUBGRADE – INTERSTATE AND FREEWAY**
1. Vertical curve points removed from both Typical Normal Crown Section and Typical Superelevated Section.
 2. “Round Bottom Ditch & Median Ditch” removed from Title Block.
- 225.04** **1** **METHOD OF OBTAINING SUPERELEVATION – TWO LANE PAVEMENT**
1. Removed “2/3” and “1/3” from runoff labels. Added asterisks after “RUNOFF”, which references a new note.
 2. In Section D-D, removed references to “2/3” . Added asterisks after “SUPERELEVATION”, which references a new note.
 3. Added “FULL” to the superelevation note.
- 225.05** **1** **METHOD OF OBTAINING SUPERELEVATION – DIVIDED HIGHWAYS**
1. In General Notes, replaced reference to “A Policy on Geometric Design of Highways and Streets” with “Roadway Design Manual”.
- 225.08** **2** **EARTH BERM MEDIAN PIER PROTECTION**
- SHEET 2 –**
1. Removed “as part of the paving contract” from Note 2.
- 235.01** **1** **EMBANKMENT MONITORING**
1. Added welding note.
- 240.01** **1** **GUIDE FOR BERM DITCH CONSTRUCTION**
1. Removed “with concrete, rip rap, or fiberglass roving ditch liner” from Note.
- 275.01** **1** **ROCK PLATING**
1. Detail in Lieu of Standard replaced old drawing.
 2. Added note to Detail No. 1 to indicate 8’ long guardrail posts.
- DIVISION 3 -**
- 300.01** **3** **METHOD OF PIPE INSTALLATION FLEXIBLE PIPE**
- SHEET 1 -**
1. All references to Type 2 Geotextile revised to indicate Type IV Geotextile.
 2. Note added to direct users to Pipe Material Selection Guide and Standard Specifications for allowable pipe fill heights and pipe specifications.
- SHEET 2 –**
1. All references to Type 2 Geotextile revised to indicate Type IV Geotextile.

2. Note added to direct users to Pipe Material Selection Guide and Standard Specifications for allowable pipe fill heights and pipe specifications.

SHEET 3 –

DELETED. Pipe Material and Selection Guide and Standard Specifications should be used to determine allowable pipe fill heights, and pipe specifications.

DIVISION 4 -

ALL 422 DRAWINGS HAVE BEEN DELETED, SINCE SECTION 422 IN NCDOT STANDARD SPECIFICATIONS REFERENCES APPROACH SLABS (NOT FILLS)

422.01	2	<u>BRIDGE APPROACH FILLS TYPE I – STANDARD APPROACH FILL</u>
		<u>SHEETS 1 & 2 – DELETED</u>
422.02	2	<u>BRIDGE APPROACH FILLS TYPE II – MODIFIED APPROACH FILL</u>
		<u>SHEETS 1 & 2 – DELETED</u>
422.03	4	<u>BRIDGE APPROACH FILLS TYPE A – ALTERNATE APPROACH FILL FOR INTEGRAL ABUTMENT</u>
		<u>SHEETS 1 – 4 DELETED</u>

MANY REVISIONS WERE NEEDED, SO NEW DRAWINGS WERE DEVELOPED. THESE DRAWINGS HAVE BEEN REORDERED AND START AT 423. SIGNIFICANT CHANGES BETWEEN OLD AND NEW ARE AS FOLLOWS:

423.01	2	<u>BRIDGE APPROACH FILLS - TYPE 1 APPROACH FILL – APPROACH FILL FOR BRIDGE ABUTMENT</u>
		<u>SHEET 1 –</u>
		<ol style="list-style-type: none">1. Renumbered sheet from 422.01 to 423.01.2. Changed title block from “Type 1 – Standard Approach Fill” to “Type 1 Approach Fill – Approach Fill for Bridge Abutment”.3. Limits of Type 1 Approach Fill are variable, instead of 4’ beyond the approach slab.4. Eliminated drain pipe under approach fill. Labeled low point.5. Added hardware cloth where pipe will sleeve through the wing wall to the outlet pad.
		<u>SHEET 2 –</u>
		<ol style="list-style-type: none">1. Renumbered sheet from 422.01 to 423.01.2. Changed title block from “Type 1 – Standard Approach Fill” to “Type 1 Approach Fill – Approach Fill for Bridge Abutment”.3. Note added under Section A-A, to show use for girder bridges, cored slabs, and box beam bridges.4. Backslope is shown as a 1 ½ : 1 and no longer required to be sloped to tie 4’ beyond approach slab.

5. Extended 6" +/- layer of select material to end of approach slab if 1 1/2 : 1 intersects subgrade under the approach slab.
6. Temporary fill slope required to ensure good compaction on final back slope. Labeled 3' dimension for temporary fill slope.
7. Type 4a Geotextile added 6" below approach slab with 2% slope draining back to approach fill.
8. Lower limits of approach fill raised by 12" +/-
9. Pipe eliminated under approach fill. Pipe sleeved through wing wall to outlet pad. Labeled low point on Inset A.
10. Hardware cloth added to cover hole through wing wall.
11. Added note to turn Type 1 geotextile up 18" on wing walls.

423.02

3

**BRIDGE APPROACH FILLS - TYPE 1A APPROACH
FILL - ALTERNATE APPROACH FILL FOR
INTEGRAL BRIDGE ABUTMENT**

SHEET 1 –

1. Renumbered and reordered sheets from 422 to 423.
2. Limits of Type 1A Approach Fill adjusted.
3. Changed title block to read "Bridge Approach Fills – Type 1A Approach Fill – Alternate Approach Fill for Integral Bridge Abutment".
4. Eliminated drain pipe under approach fill. Labeled low point.
5. Added hardware cloth where pipe will sleeve through the wing wall to the outlet pad.
6. Labeled the 3' offset to the low point and drain pipe.

SHEET 2 –

1. Renumbered and reordered sheets from 422 to 423.
2. Changed title block to read "Bridge Approach Fills – Type 1A Approach Fill – Alternate Approach Fill for Integral Bridge Abutment".
3. Backslope is shown as a 1 1/2 : 1 and no longer required to be sloped to tie 4' beyond approach slab.
4. Extended 6" +/- layer of select material to end of approach slab if 1 1/2 : 1 intersects subgrade under the approach slab.
5. Temporary fill slope required to ensure good compaction on final back slope. Labeled 3' dimension for temporary fill slope.
6. Type 4a Geotextile added 6" below approach slab and 2% slope draining back to approach fill.
7. Lower limits of approach fill raised by 12" +/- and pipe sleeved through wing wall.
8. Number of geotextile layers reduced due to raising lower limits by 12" +/-.
9. Pipe eliminated under approach fill. Pipe sleeved through wing wall to outlet pad.
10. Hardware cloth added to cover hole through wing wall.

SHEET 3 –

1. Renumbered and reordered sheets from 422 to 423.
2. Changed title block to read "Bridge Approach Fills – Type 1A Approach Fill – Alternate Approach Fill for Integral Bridge Abutment".
3. Type 4a Geotextile shown 6" below approach slab for the entire footprint of the approach fill.
4. Backslope is no longer variable.
5. Lower limits of approach fill raised 12" +/- to be consistent with Type 1

SHEET 8 –

1. Added notes for Right Edge From Face of Barrier, Left Edge from Face of Barrier, Right Edge From Face of Barrier Measurements, Left Edge From Face of Barrier Measurements, Face of Barrier, and Back of Barrier.
2. Revised 3'-5" dimension on End View to 41".

862.01

15 **GUARDRAIL PLACEMENT**

SHEET 1 –

1. Detail in lieu of standard replaced old drawing.
2. Revised sheet number to reflect 4 new sheets added.

SHEET 2 –

1. Detail in lieu of standard replaced old drawing.
2. Revised sheet number to reflect 4 new sheets added.

SHEET 3 –

1. "L" variable revised to Guardrail Length of Need "X" to match AASHTO Roadside Design Guide.
2. Added triple asterisk to 50:1 OR FLATTER FLARE RATE dimension, to correspond with note below.
3. "N₁" dimension added, based on shoulder widths in the Roadway Design Manual.
4. Revised table showing DIMENSIONS FOR LENGTH OF GUARDRAIL APPROACHING DUAL LANE BRIDGES, to reflect median width and -L2- dimension only.
5. Flare rate note revised.
6. Guardrail length of need note added.
7. Revised sheet number to reflect 4 new sheets added.

SHEET 4 –

1. "L" variable revised to Guardrail Length of Need "X" to match AASHTO Roadside Design Guide.
2. "N₁" dimension added, based on shoulder widths in the Roadway Design Manual.
3. Flare rate note revised.
4. Guardrail length of need note added.
5. Removed GUARDRAIL INSTALLATION AT BRIDGE APPROCHES table.
6. Revised sheet number to reflect 4 new sheets added.

SHEET 5

1. "L" variable revised to Guardrail Length of Need "X" to match AASHTO Roadside Design Guide.
2. Removed MINIMUM GUARDRAIL LENGTHS "L" table and corresponding note.
3. Guardrail length of need note added.
4. Revised sheet number to reflect 4 new sheets added.

SHEET 6 –

1. Revised "N" to "N₁".
2. Revised sheet number to reflect 4 new sheets added.

SHEET 7 –

1. Revised sheet number to reflect 4 new sheets added.

SHEET 8 –

1. Revised sheet number to reflect 4 new sheets added.

SHEET 9 –

1. Revised sheet number to reflect 4 new sheets added.

SHEET 11 –

1. Renumbered from Sheet 10.
2. Added 8' Guardrail Post on 2:1 Slope detail.

SHEET 12 –

1. Renumbered from Sheet 11.
2. Revised all 2'-1" dimensions to 31", to show mounting height.
3. Added bicycle note to Section D-D, along with corresponding asterisk note.
4. Added 6" offset dimension to Section D-D.
5. Revised offset dimension to 1'-6" in Section C-C of GUARDRAIL 6" FROM THE FACE OF CURB.
6. Middle drawing title changed to GUARDRAIL 6" FROM THE FACE OF CURB".
7. Offset note changed to 1'-6" in GUARDRAIL 6" FROM THE FACE OF CURB drawing.
8. Double asterisks added to both plan view drawings, along with corresponding note.
9. Bottom drawing title changed to GUARDRAIL 8' OR GREATER OFFSET FROM FACE OF CURB.
10. Revised dimension to curb and gutter to 8' MINIMUM in Section C-C of GUARDRAIL 8' OR GREATER OFFSET FROM FACE OF CURB.

862.02

9

GUARDRAIL INSTALLATION

SHEET 1 –

1. Revised all 2'-1" dimensions to 31", to show mounting height.

SHEET 3 –

1. Changed from Sheet 2 to 3, to reflect new sheet added.
2. Revised 2'-1" mounting height to 31" in note.
3. Revised Transitional Details Sheet number in note.

SHEET 4 –

1. Changed from Sheet 3 to 4, to reflect new sheet added.

SHEET 5 –

1. Changed from Sheet 4 to 5, to reflect new sheet added.
2. Revised all 2'-1" dimensions to 31", to show mounting height.
3. Revised all 1'-11" dimensions to 29".

SHEET 6 –

1. Changed from Sheet 5 to 6, to reflect new sheet added.
2. Revised all 2'-1" dimensions to 31", to show mounting height.

SHEET 7 –

1. Changed from Sheet 6 to 7, to reflect new sheet added.
2. Detail in lieu of standard replaced old drawing.

SHEET 8 –

1. Changed from Sheet 7 to 8, to reflect new sheet added.

SHEET 9 –

1. Changed from Sheet 8 to 9, to reflect new sheet added.
2. Terminal End Section added.

862.03

7

STRUCTURE ANCHOR UNITS

SHEET 1 –

1. Detail in lieu of standard replaced old drawing.
2. Revised all 2'-1" dimensions to 31", to show mounting height.
3. Revised sheet number to reflect 2 new sheets added.

SHEET 2 –

1. Detail in lieu of standard replaced old drawing.
2. Revised all 2'-1" dimensions to 31", to show mounting height.
3. Revised sheet number to reflect 2 new sheets added.

SHEET 3 –

1. Changed 2'-7" dimensions to 31" for consistency.
2. Revised sheet number to reflect 2 new sheets added.

SHEET 4 –

1. Revised all 2'-1" dimensions to 31", to show mounting height.
2. Revised sheet number to reflect 2 new sheets added.

SHEET 5 –

1. Revised all 25" dimensions to 31", to show mounting height.
2. Revised sheet number to reflect 2 new sheets added.

SHEET 6 –

1. Revised all 2'-1" dimensions to 31", to show mounting height.
2. Revised sheet number to reflect 2 new sheets added.

SHEET 7 –

1. Revised all 2'-1" dimensions to 31", to show mounting height.
2. Revised sheet number to reflect 2 new sheets added.

865.01

12

CABLE GUIDRAIL

SHEET 1 -

1. Detail in lieu of standard replaced old drawing.

SHEET 8 –

1. Corrected slip impact base welding dimension from 6 to 1/4" in ANCHOR POST DETAIL.

SHEET 12 –

1. Welding note added.

866.02

4

WOVEN WIRE FENCE WITH WOOD POST

SHEET 1 –

1. Renumbered sheet to reflect new Sheet 4.
2. Removed Hinge Clamp, Bolt Hinge, and Single Gate drawing. Moved these items to Sheet 2.

SHEET 2 –

1. Renumbered sheet to reflect new Sheet 4.
2. All drawings on Sheet 2 moved to Sheet 3.
3. Hinge Clamp, Bolt Hinge, and Single Gate drawing added from Sheet 1.
4. New Double Gate and Plunger Bar Catch drawings added.

SHEET 3 –

1. Renumbered sheet to reflect new Sheet 4.
2. All drawings on Sheet 3 moved to new Sheet 4.
3. Ditch Crossing, Alternate Types of Staples, Method of Constructing Fence on Sharp Break in Grade, and Detail of Post Anchor added from Sheet 2.

876.01

1

RIP RAP IN CHANNELS AND DITCHES

1. Added “AND DITCHES” to title block.
2. Removed “I OR II” from General Note 3.
3. Added General Note 4.
4. Revised 1st detail title to add “DITCH OR”; “OR CLASS II”; and “(“W” < 6.0 FT)”
5. Deleted asterisk from the title of 1st detail.
6. Added “MIN. CLASS I” and “24” MIN. CLASS II KEYED-IN” to 1st detail.
7. Added note to 1st detail to say “TUCK GEOTEXTILE A MINIMUM OF 1FT (TYP)”.
8. Revised 2nd detail title to add “DITCH OR”.
9. Added asterisk to title of 2nd detail.
10. Added “KEYED IN” to 2nd detail.
11. Added note to 2nd detail to say “TUCK GEOTEXTILE A MINIMUM OF 1FT (TYP)”.
12. Added “TOEWALL” to 3rd detail.
13. Deleted line in the Class I table for 0’-5’.
14. Added asterisk to Class II table.

876.02

1

GUIDE FOR RIP RAP AT PIPE OUTLETS

1. Added note to PIPE OUTLET WITH DITCH SECTION to say, “TUCK GEOTEXTILE MIN OF 1FT (TYP) (PIPE OUTLET WITH DITCH ONLY)”.
2. Redrew riprap and existing ground to be keyed-in.
3. Revised T= 15” to T= 18” in PIPE OUTLET WITH DITCH notes.
4. Added note under PIPE OUTLET WITH DITCH to read “KEY IN RIP-RAP”.

876.03

1

DRAINAGE DITCHES WITH CLASS ‘A’ RIP RAP

1. Added general note to say “KEY IN RIP-RAP”.

876.04

1

DRAINAGE DITCHES WITH CLASS ‘B’ RIP RAP

1. Added general note to say “KEY IN RIP-RAP”.

2. Added note to SIDE DRAINS, BASE DITCH OR OTHER OUTLET DITCHES to read “TUCK GEOTEXTILE A MINIMUM OF 1 FT (TYP)”.
3. Added note to VEE DITCH to read “TUCK GEOTEXTILE A MINIMUM OF 1 FT (TYP)”.

DIVISION 9 -

901.10 2 TYPE ‘A’ SIGNS

SHEET 1 –

1. Added “STRIP” to Note 4.

901.20 1 TYPE ‘B’ SIGNS

1. Revised to match Detail A on Roadway Standard Drawing 901.10, Sheet 2 of 2.

901.50 2 ARROWS AND SHIELDS

SHEET 1 -

1. Revised “TYPE C” arrows to “DOWN” arrows.

901.60 1 RIVET SPACING FOR OVERLAYED SIGNS

1. Removed “(NOT TO BE USED ON OVERHEAD SIGNS)” from Detail 4 drawing.

903.10 3 GROUND MOUNTED SIGN SUPPORTS

SHEET 1 –

1. Added “4” MAX” to top of stub on Base Connection.

SHEET 2 –

1. Removed Footing Details and Foundation Data Table from sheet. The deleted information was incorporated into new Standard Drawing 902.10.

SHEET 3 –

1. Switched 3/8” and 5/8” in table.

903.20 2 WOOD SIGN POST

SHEET 1 –

1. In Note No. 1, changed reference from “SECTIONS 1082-2 AND 1082-3” to read “SECTION 1082”.

SHEET 2 –

1. In Note No. 3, revised “U CHANNEL POSTS” to read “U CHANNEL SUPPORTS”.

903.30 1 BARRIER SIGN SUPPORT ASSEMBLY

1. In Note No. 2, revised “U CHANNEL POSTS” to read “U CHANNEL SUPPORTS”.

903.40 **2** **MEDIAN BARRIER SIGN SUPPORT AND ANCHORAGE**

SHEET 1 –

1. Added note for welding

SHEET 2 –

1. Corrected welding symbology.

904.40 **1** **MILEPOST AND PLACEMENT**

1. In Note No. 3, revised all references to “U CHANNEL POSTS” to read “U CHANNEL SUPPORTS”.

904.50 **2** **MOUNTING OF TYPE ‘D’, ‘E’ AND ‘F’ SIGNS ON ‘U’-CHANNEL SUPPORTS**

SHEET 1 –

1. Revised Note No. 2.
2. Revised Title Block to read “U CHANNEL SUPPORTS”.

SHEET 2 –

1. Revised Title Block to read “U CHANNEL SUPPORTS”.

910.20 **4** **SIGNING SCHOOL ZONE MARKED CROSSWALK WHERE SPEED REDUCTION IS REQUIRED**

SHEET 1 –

1. Added S4-4P “WHEN FLASHING” sign next to SNC4-1a sign.
2. Added Note No. 3.

910.30 **2** **SIGNING UNSIGNALIZED REDUCED CONFLICT INTERSECTION**

SHEET 1 –

1. Deleted “NO LEFT-TURN” and “THRU” signs.
2. Revised “SUPERSTREET” in title block to “REDUCED CONFLICT INTERSECTION”.

SHEET 2 –

SIGNING SIGNALIZED REDUCED CONFLICT INTERSECTION

1. Corrected “SOUTH” to “NORTH”.
2. Revised “SUPERSTREET” in title block to “REDUCED CONFLICT INTERSECTION”.

910.40 **2** **SINGLE LANE ROUNDABOUT**

SHEET 1 –

1. Added Note No. 9.

910.50

1

SIGNING FOR SPEED REDUCTION ZONE

1. Removed "IF USED" from Note 3.

DIVISION 11 -

1101.01

3

WORK ZONE ADVANCE WARNING SIGNS FOR FACILITIES < 55 MPH

ALL SHEETS -

1. Revised Note 2 from "3 CONSECUTIVE DAYS" to "72 CONSECUTIVE HOURS".

SHEET 1 –

1. Removed note under DETAIL A, regarding \$250 speeding penalty sign.

1101.02

19

TEMPORARY LANE CLOSURES

ALL SHEETS –

1. Revised sheet numbers from "XX of 14" to "XX of 19" to reflect five new sheets added.

SHEET 1 –

1. Rewrote Flagging Operation Note 4.
2. Revised Flagging Operation Note 6.
3. Revised Flagging Operation Note 11 from 15' to 100'.
4. Added Flagging Operation Note 12.
5. Revised Pilot Car Operations Note 5.

SHEET 2 –

1. Deleted Note 3, and renumbered remaining notes.
2. Changed the reference in new Note 4 from "AS RECOMMENDED BY THE MANUFACTURER" to "AS RECOMMENDED BY RSD 1165.01".
3. Added new Note 8.
4. Removed the flagger symbol on the side road, and replaced the flagger warning sign with a "ROAD WORK AHEAD" sign.

SHEET 3 –

1. Revised Note 5 to refer to RSD 1101.02, SHEETS 10 & 11.
2. Revised Note 7.
3. Revised Note 8 to add, "CMS IS NOT REQUIRED WHEN POSTED SPEED LIMIT IS BELOW 45 MPH."
4. Added Note 10.

SHEET 4 –

1. Added an additional initial placement CMS 4 miles in advance of existing CMS.
2. Moved reference to "SEE NOTE 7" to new initial CMS placement.
3. Added CMS-1 and CMS-2 labels to CMS board depictions.
4. Removed old Note 1, and renumbered remaining notes.
5. Revised new Note 4 to refer to RSD 1101.02, SHEETS 10 & 11.
6. Revised new Note 6.
7. Revised new Note 7.
8. Changed NOTE 7 references in drawing to NOTE 6.
9. Changed NOTE 8 references in drawing to NOTE 7.

10. Added new Note 9.

SHEET 5 –

1. Removed all details left of the end of the merge taper. Replaced with a breakline, and a new note referencing Note 1.
2. Changed wording just prior to breakline to read “TO MERGE TAPER”.
3. Removed old Notes 1, 2, 5, 6, 9, 10 and 11. Added new Note 1 and renumbered remaining notes.
4. Revised new Note 3 to refer to RSD 1101.11, SHEET 1 only.
5. Revised new Note 5 to add, “TMA IS NOT REQUIRED WHEN POSTED SPEED LIMIT IS BELOW 45 MPH”.
6. Added new Note 6.
7. Revised reference on TMA ROLL-AHEAD DISTANCE in drawing, to read “SEE NOTE 5”.

SHEET 6 –

1. Removed all details left of the end of the merge taper. Replaced with a breakline, and a new note referencing Note 1.
2. Changed wording just prior to breakline to read “TO MERGE TAPER”.
3. Removed Notes 1, 2, 5, 6, 9, 10, 11. Added new Note 1 and renumbered remaining notes.
4. Revised new Note 3 to refer to RSD 1101.11, SHEET 1 only.
5. Revised new Note 5 to add, “TMA IS NOT REQUIRED WHEN POSTED SPEED LIMIT IS BELOW 45 MPH”.
6. Added new Note 6.
7. Revised reference on TMA ROLL-AHEAD DISTANCE in drawing, to read “SEE NOTE 5”.

SHEET 7 –

1. Moved location of flashing arrow boards in the drawing.
2. Added CMS to DETAIL OF SIGN PLACEMENT.
3. Added Note 3.

SHEET 8 –

1. Moved the top two CMS to the right side of the road.
2. Added CMS-1 and CMS-2 labels to CMS board depictions.
3. Changed the first CMS dimension on top and bottom to read, “4 MILE INITIAL PLACEMENT (SEE NOTE 3).”
4. Changed CMS messages on top to read, “ROADWORK 6 MILES AHEAD, LANES CLOSED AHEAD”, and “LEFT 2 LANES CLOSED MERGE RIGHT”.
5. Changed CMS messages on bottom to read, “ROADWORK 6 MILES AHEAD, LANES CLOSED AHEAD”, and “RIGHT TWO LANES CLOSED MERGE LEFT”.
6. Revised Note 1.
7. Added Notes 3 and 4.

SHEET 10 –

1. Renumbered from Sheet 9.
2. Removed “MERGE TAPER L” dimension, and replaced with 300’.
3. Changed “SEE NOTE 2” to “SEE NOTE 1” by R1-2.
4. Changed “RAMP ACCELERATION LANE SEE NOTE 3” to read “SEE NOTES 2 & 3”.

5. Added "SEE NOTE 3" to the left of the WORK AREA in the top drawing.
6. Added "SEE NOTE 3" to ½ L MINIMUM TO END OF RIGHT LANE CLOSURE MERGE TAPER.
7. On both drawings, added a new RAMP NARROWS sign in advance of the shift taper, and added the corresponding "A" dimension.
8. Changed the 16' label on the bottom drawing to 16' MIN. Added a 16' MIN. dimension on the top drawing.
9. Reversed Notes 1 and 2, and revised wording of new Note 2.
10. Revised Note 3.
11. Deleted Note 5 and renumbered remaining notes.
12. Revised new Note 5 to add "FROM THE PERMANENT CONDITION".
13. Added Notes 7, 8, & 9.
14. Corrected "SEE NOTE 7" to "SEE NOTE 6", by the Changeable Message Sign in the bottom drawing.

SHEET 11 –

1. Renumbered from Sheet 10.
2. Removed "½ L MINIMUM TO END OF RIGHT LANE CLOSURE MERGE TAPER" dimensions, and added "SEE NOTE 1" to both drawings.
3. Deleted excess drums in the area left of the new "LIMITS OF 10' DRUM SPACING" dimensions.
4. Replaced the "50' MIN." dimension in the top drawing, with "TMA SPACE" and "TMA ROLL-AHEAD DISTANCE".
5. Added "LIMITS OF 10' DRUM SPACING" to both drawings.
6. Added "LIMITS OF 20' DRUM SPACING" to both drawings, and added corresponding dimension of "200' MIN.".
7. Added "EXIT OPEN (OPTIONAL)" sign to both drawings.
8. Revised Note 1.
9. Added Note 4.

SHEET 14 –

1. Renumbered from Sheet 11.
2. Removed W26-18SP "SLOW MOVING TRAFFIC" from drawing.

SHEET 15 –

1. Renumbered from Sheet 12.
2. Added new Note 10, and renumbered remaining notes.

SHEET 16 –

1. Renumbered from Sheet 13.
2. Changed flashing arrow boards on "APPLICATION VEHICLE WITH FAB" and "PROTECTION (SHADOW) VEHICLE WITH TRUCK MOUNTED CMS" to four-corner.
3. Removed flashing arrow from Message No. 2 on the truck mounted CMS to four-corner.
4. Revised Note 1.
5. Corrected references on the two truck mounted changeable message signs to SEE NOTE 11 and SEE NOTE 12.
6. Added reference for portable changeable message sign to SEE NOTES 5 & 12.
7. Removed W20-5L "LEFT LANE CLOSED" sign from drawing.

SHEET 17 –

1. Renumbered from Sheet 14.
2. Added ‘SEE NOTE 12’ callout to stop bars.
3. Revised Note 4.
4. Revised Note 9.
5. Added Notes 12 & 13.
6. Added sign codes to the drawing.
7. Removed the 100’ @ 20’ spacing cones.
8. Added direction of traffic flow arrows to the drawing.
9. Changed the portable signal icon in the legend to match drawing.

1101.03

9

TEMPORARY ROAD CLOSURES

SHEET 1 –

1. Removed barricade mounted sign R11-4 from drawing.
2. Added W16-3P sign to drawing.
3. Removed “IF NECESSARY” from Note 1.
4. Changed sign designation from “R11-4” to “R11-3” in Note 4.
5. Removed Note 5, and renumbered remaining notes.
6. Added a CMS board with a dimension “2500’ \pm , SEE NOTE 7” from the first signs, with appropriate messages prior to closing and during closing.
7. Added CMS and barricade to legend.
8. Added Note 7.

SHEET 2 –

1. Added CMS and barricade to legend.
2. Added a CMS board with a dimension “2500’ \pm , SEE NOTE 6” from the first signs, with appropriate messages prior to closing and during closing.
3. Removed “IF NECESSARY” from Note 1.
4. Added Note 6.

SHEET 3 –

1. Added barricade to legend.
2. Changed “500’ MIN. NO-PASSING TRAIL END” to “100’ MIN. NO-PASSING TRAIL END”.
3. Changed “1500’ MIN. NO-PASSING APPROACH END” to “900’ MIN. NO-PASSING APPROACH END”.
4. Added reference to “SEE NOTE 9” to both ends of drawing.
5. Added Note 9.

SHEET 4 –

1. Removed all details before end of merge tapers. Replaced with a breakline and a dimension call-out saying “SEE NOTE 1”.
2. Revised Note 1.
3. Removed Notes 5 & 7 and renumbered remaining notes.
4. Removed match lines and combined two drawings into one.
5. Added “TO MERGE TAPER” to dimension call-outs.
6. Removed optional W13-1 signs from drawing.
7. Removed CMS from legend.
8. Added barricade to legend.

SHEET 5 –

1. Removed Note 3, and renumbered remaining notes.
2. Replaced the “MERGE LEFT INTO SINGLE LANE” sign, and added an optional “EXIT OPEN” sign to the exit ramp drawing.

SHEET 6 –

1. Removed all details before end of merge tapers. Replaced with a breakline and a dimension call-out saying “SEE NOTE 4”.
2. Removed match lines and combined two drawings into one.
3. Added “TO MERGE TAPER” to dimension call-outs.
4. Added 20’ drum spacing dimension.
5. Revised Note 1.
6. Added Note 2, removed Note 5, and renumbered remaining notes.
7. Revised new Note 4.
8. Added “AT A 10’ SPACING” to new Note 5.

SHEET 7 –

1. Added a breakline to the end of the merge taper.
2. Left of the breakline, made all devices not specific to this operation transparent.
3. Removed all dimensions for transparent devices.
4. Added text to read “SHADED DEVICES SHOWN ARE REPRESENTATIVE ONLY. REFER TO APPROPRIATE LANE CLOSURE RSD 1101.02 FOR SIGNS, DEVICES AND NOTES FOR THE LANE CLOSURE(S)”.
5. Added “TO MERGE TAPER” to “L” dimension call-out.
6. Changed dimension on non-transparent CMS to “2 ½ MILES”.
7. Added TMA and barricade to legend.
8. Removed Notes 1 and 5, and renumbered remaining notes.
9. Corrected reference of “SEE NOTE 6” to read “SEE NOTE 3” under the CMS.
10. Added Note 4.

SHEET 8 –

1. Moved flagging devices on right side of work area to right side of road.
2. Added “SEE NOTE 5” under optional law enforcement in drawing.
3. Added Notes 6 through 9.
4. Added barricade to legend.

SHEET 9 –

1. Added “(OPTIONAL)” note to the law enforcement symbol.
2. Added information to Note 10 regarding law enforcement being used as one of the pilot vehicles.
3. Added Note 11.

1101.04

2

TEMPORARY SHOULDER CLOSURES

SHEET 1 -

1. Changed label on top drawing to “SHOULDER CLOSURE ON DIVIDED FACILITIES USING BARRIER”.
2. Changed label on bottom drawing to “SHOULDER CLOSURE ON DIVIDED FACILITIES USING CHANNELIZING DEVICES”.
3. Adjusted crash cushion to be on pavement.

4. Changed reference on top shoulder to read "PAVED SHOULDER", and on bottom shoulder to read "SHOULDER".
5. Corrected line style for PCB in legend.
6. Added "LENGTH VARIES – SEE NOTE 4" to SHOULDER CLOSURE TAPER dimension in top drawing.
7. Changed Note 3 from "3 DAYS" to "72 HOURS".
8. Removed downstream taper on barrier in top drawing.
9. Changed sheet number to "1 OF 2" to reflect new sheet added.

1101.05 2 WORK ZONE VEHICLE ACCESSES

SHEET 1 –

1. Added barricade to legend.

SHEET 2 –

1. Removed text "DETAIL SHOWN FOR LEFT SIDE, SAME PRINCIPLE APPLIES FOR RIGHT SIDE ACCESS" from top and bottom drawings.
2. Removed "SHEET 3" from the reference in top drawing.
3. Removed "EXTEND DRUM LENGTH SO TRUCK CAN MERGE TO EXISTING TRAFFIC SPEED" from bottom drawing.
4. Changed title block to read "MEDIAN ACCESS THROUGH TEMPORARY BARRIER"
5. Added Note 4.

1101.06 1 WARNING SIGNS FOR BLASTING ZONES

1. Added Note 5.

1101.11 4 TRAFFIC CONTROL DESIGN TABLES

SHEET 1 –

1. Added note to read, "USE FULL L FOR CONTROLLED-ACCESS FACILITIES UNLESS RESTRICTED BY FIELD CONDITIONS AS DETERMINED BY THE TRAFFIC CONTROL SUPERVISOR OR THE ENGINEER" to shifting taper length entry.
2. Revised definition of "S" under General Note 1.

SHEET 2 –

1. Removed passing sight distance column from chart.
2. Removed Note 4.

SHEET 3 –

1. Revised Note 1.

SHEET 4 –

1. Revised Note 1.

1101.01 3 STATIONARY WORK ZONE SIGNS

SHEET 1 –

1. Revised Note 2.

2. Changed the dimension on the secondary sign from “1’ LESS THAN MAIN SIGN HEIGHT” to “2’ LESS THAN MAIN SIGN HEIGHT”.

SHEET 2 –

1. Removed ‘COMPLY WITH ALL NCHRP REPORT 350 REQUIREMENTS’ from General Note 1.

1110.02 1 PORTABLE WORK ZONE SIGNS

1. Revised Note 2.
2. Under MOUNTING HEIGHT DIMENSIONS, changed the note to read, “TO THE BOTTOM OF THE SIGN”.

1145.01 1 BARRICADES – TYPE III

1. Inserted the missing word “BARRICADES” into Note 1.
2. Removed reference to R11-4 signs in Note 4.
3. Removed “(STABILIZER BAR REQUIRED) (SEE NOTE 6)” from beneath barricade drawings.
4. Revised Note 2.
5. Removed Notes 5 and 11, and renumbered remaining notes.

1150.01 1 FLAGGING DEVICES

1. Changed dimensions to 24” on STOP / SLOW PADDLE.
2. Removed references to non-reflectorized sign usage under SLOW sign, and deleted note below.

1165.01 1 TRUCK MOUNTED ATTENUATOR

1. Added ROLL AHEAD DISTANCE table.
2. Changed note under TMA DELINEATION inset to read ‘YELLOW OR ORANGE STRIPES RETROREFLECTIVE SHEETING’.
3. Added Note 4.

1170.01 7 PORTABLE CONCRETE BARRIER - MASH APPROVED F-SHAPE K-WALL

3 OF 4 SHEETS OF 1170.01 HAVE BEEN DELETED AND REPLACED WITH 6 NEW PORTABLE CONCRETE BARRIER SYSTEM DRAWINGS. THE ONLY DRAWING TO REMAIN WAS 1170.01, SHEET 4 OF 4 (ANCHORING METHODS), WHICH HAS BEEN RENUMBERED AND RENAMED. NEW SHEETS 1 THROUGH 6 ARE ALL MASH APPROVED PORTABLE CONCRETE BARRIERS, AND THIS DESIGNATION WAS ADDED TO THE TITLE BLOCKS.

SHEET 7 –

1. Renumbered from sheet 4.
2. Revised title block to add “NCHRP 350 PORTABLE CONCRETE BARRIER”.

1180.01 **1** **SKINNY DRUM**

1. Corrected Note 4 to read, “ROADS AND STRUCTURES”.

DIVISION 12 -

1205.01 **2** **PAVEMENT MARKINGS – LINE TYPES AND OFFSETS**

SHEET 1 –

1. Revised 2’-6’ and 3’-9’ Mini-Skip Line notes to incorporate bicycles.

1205.07 **2** **PAVEMENT MARKINGS – PEDESTRIAN CROSSWALKS**

SHEET 1 –

1. Changed sheet number to “1 of 2” to reflect new sheet added.

1205.08 **9** **PAVEMENT MARKINGS – SYMBOLS AND WORD MESSAGES**

SHEET 2 –

1. Deleted the word “SYMBOL” after the titles showing “YIELD LINE”.

SHEET 3 –

1. Deleted all bicycle lane symbols. These will be moved to new Standard Drawing 1205.16.

1205.12 **1** **PAVEMENT MARKINGS – BRIDGES**

1. Removed W5-2A signs.

1205.13 **1** **PAVEMENT MARKINGS – LANE REDUCTIONS**

1. W4-2R/W4-2L dimensions removed. Sign sizes determined by MUTCD.

1205.14 **2** **PAVEMENT MARKINGS – ROUNDABOUTS**

SHEET 1 –

1. Removed the word “SYMBOL” after the phrase “YIELD LINE”.

SHEET 2 –

1. Removed the word “SYMBOL” after the phrase “YIELD LINE”.

1205.15 **2** **PAVEMENT MARKINGS – REDUCED CONFLICT INTERSECTIONS**

SHEET 1 –

1. Revised “SUPERSTREETS” in title block to “REDUCED CONFLICT INTERSECTIONS”.

SHEET 2 –

1. Revised “SUPERSTREETS” in title block to “REDUCED CONFLICT INTERSECTIONS”.

1253.01 **1** **RAISED PAVEMENT MARKERS SNOWPLOWABLE**

DELETED

1264.02 **1** **OBJECT MARKERS INSTALLATION**

1. All references to POST(S) revised to read SUPPORT(S).
2. 1.12 LB/FT removed from Type 4 Markers for End of Roadway.

DIVISION 14 -

1401.01 **2** **HIGH MOUNT STANDARD**

SHEET 1 –

1. Added “(TYP.)” under the word “LUMINAIRE” in the six luminaire array.

SHEET 2 –

1. In the Portable Drive Power Supply, removed the 2KVA requirement from the transformer and replaced with delta note 2.
2. Delta note 2 added to NOTES.

1402.01 **1** **HIGH MOUNT FOUNDATION**

1. Changed the CY for the 90 MPH, 120 FT pole from 8.2 to 8.8. This was a calculation error that had been carried for a few update cycles.
2. Added the 3/4" grounding conductor conduit to the foundation.
3. Removed the conduit exiting to the left of the foundation, since all conduit goes to a HMJB.
4. Included 30" dimension from finished grade to the conduits exiting the foundation.

1404.01 **3** **LIGHT STANDARDS**

SHEET 1 –

1. Corrected error in delta note 1 referring to sheet 2 instead of 3.
2. Removed last part of delta note 4 to align with RDM guidance.
3. Updated delta note 9 to include statement about positioning pole numbers for viewing from control system location.
4. Added delta note 10.
5. Added delta note 11.

SHEET 2 –

1. Adjusted mounting height arrow to show bottom termination at finished grade instead of top of barrier.

1405.01 **3** **STANDARD FOUNDATION**

SHEET 1 –

1. Added JB & metal bars to elevation view on top left.
2. Updated note on vertical bars to include a 12" lap.
3. Added notes 6, 7, and 8 for clarity.

SHEET 3 –

1. Added allowance for welded wire between the baseplate and foundation.

1406.01 1 LIGHT STANDARD LUMINARIES

1. Raised finished grade to top of foundation.

1407.01 1 ELECTRIC SERVICE POLE AND LATERAL

1. Changed CT and meter to better show the CT cabinet.
2. Changed underground service lateral to PVC.
3. Added RGC to PVC adapter for service lateral.
4. Added height requirement for CT cabinet.

1408.01 3 LIGHT CONTROL SYSTEM

SHEET 1 –

1. Corrected incorrect service breaker size in schematic.
2. Added note 12 concerning service barriers.
3. Removed the breaker amperage requirement in the component list.
4. Updated double asterisk note to refer to plans for breaker sizes.

SHEET 2 –

1. Added note 11.
2. Added range for max height of cabinet.

SHEET 3 –

1. Added note 5.

1409.01 1 ELECTRICAL DUCT

1. Added notes 1 & 2.
2. Added Detail A, B, C, and D under the different details.
3. Changed "CIRCUIT IN CONDUIT" to "FEEDER CIRCUIT", to match other drawings in the RSDs.
4. Changed "JACKED, DRILLED OR BURIED DUCT" to "TRENCHLESS DUCT", to match updated language in the RSDs.
5. Changed offset from EOT to EOP for Detail B.

1410.01 1 FEEDER CIRCUITS

1. Added note 2.

1411.01 1 ELECTRICAL JUNCTION BOXES

1. Removed sealer from the duct.
2. Changed note 1 from sealer to stacking.
3. Added detail drawing for nylon wire tie.

1412.01 **2** **UNDERPASS LIGHTING**

SHEET 1 –

1. Updated quick disconnect leader to point to the disconnect instead of blank space.
2. Changed item 4 in the components list to from acrylic to glass refractor.

SHEET 2 –

1. Added note 5.
2. Changed conduit from RGC to PVC for all conduit above the disconnect.
3. Changed disconnect voltage to 480V to align with standard designs.
4. Clarified refractor should be glass, in #2 of the components list.

DIVISION 15 -

1525.06 **2** **PRECAST CONCRETE SANITARY SEWER
MANHOLE WITH CAST-IN PLACE BOTTOM**

SHEET 2 –

1. Added “6’ Precast Manhole” to Reinforced Concrete Footing title.

DIVISION 16 -

1604.01 **1** **RAILROAD EROSION CONTROL DETAIL**

1. Modified “PRIME SOURCE GRIP CAP OR EQUIVALENT” in notes to read “PLASTIC BUTTON CAP TYPE NAILS”.

1630.03 **1** **TEMPORARY SILT DITCH**

1. Modified “VAR. 2’ TO 10’ ” dimension to read “2’ MIN.”.
2. Added “1’ MIN.” dimension.

1630.04 **1** **STILLING BASIN FOR PUMPED EFFLUENT**

1. Changed “EARTH DIKE” to “EARTH EMBANKMENT”.

1630.05 **1** **TEMPORARY DIVERSION**

1. Removed “2’ MINIMUM” from top of berm.
2. “1’-6” MINIMUM” revised to “1’ MINIMUM”.
3. Changed “6’ TYPICAL” at bottom of berm to read “2’ MINIMUM”.

1631.01 **1** **MATTING INSTALLATION**

1. Added “A” callout for trenching on MATTING IN DITCHES diagram.
2. Added note for trenching.

1632.01 **1** **ROCK INLET SEDIMENT TRAP TYPE A**

1. Changed 7’-6” dimension on SECTION A-A to 9’-6”.

1632.02 **1** **ROCK INLET SEDIMENT TRAP TYPE B**

1. Changed 5'-6" dimension on SECTION A-A to 7'-0".

1632.03 **1** **ROCK INLET SEDIMENT TRAP TYPE C**

1. Deleted note that read "PLACE TOP OF WIRE MESH A MINIMUM OF ONE FOOT BELOW THE SHOULDER OR ANY DIVERSION POINT".

1640.01 **1** **COIR FIBER BAFFLE**

1. Changed three references to 12" staple length to 6" staple length.

DIVISION 17 -

1700.01 **3** **ELECTRICAL SERVICE OPTIONS**

SHEET 1 -

1. Updated sheet number to reflect new sheet added.

SHEET 2 -

3. Added required main breaker disconnect per recent NEC changes.
4. Added note for service entry conductors and removed listed conductor size.
5. Added notes for the conductors feeding the traffic signal cabinet, and added option for 30 amp service.
6. Added note for grounding electrode conductor, to indicate for traffic signal installations the insulation shall be green with yellow stripe(s).
7. Changed conductor size for grounding electrode conductor.
8. Updated sheet number to reflect new sheet added.

1700.02 **2** **ELECTRICAL SERVICE GROUNDING**

SHEET 1 -

1. Updated ground rod and marker tape depth.
2. Added notes.
3. Updated irreversible connection language.

SHEET 2 -

1. Added required main breaker disconnect per recent NEC changes.
2. Added note for service entry conductors and removed listed conductor size.
3. Added notes for the conductors feeding the traffic signal cabinet, and added option for 30 amp service.
4. Added note for grounding electrode conductor, to indicate for traffic signal installations the insulation shall be green with yellow stripe(s).
5. Changed conductor size for grounding electrode conductor.

1705.01 **2** **SIGNAL HEADS – VEHICULAR SIGNAL HEADS**

SHEET 1 -

1. Added callout for "coiled signal cable".

SHEET 2 –

1. Added columns and rows for transit and bicycle signals.
2. Updated legend.

1705.02

6

SIGNAL HEADS – PEDESTRIAN ASSEMBLIES

SHEET 6 –

1. Changed to 4-section signal heads.
2. Added signs.
3. Changed “TRANSFORMER BASE” note.
4. Updated Note No. 3.
5. Changed height dimension.

1705.03

1

SIGNAL HEADS WIRE COLOR CONVENTIONS

1. Added transit signal, bicycle signal, and pedestrian hybrid beacon.

1716.01

1

JUNCTION BOXES

1. Specified different logos for traffic signal and ITS projects, as well as over-sized and special over-sized pull boxes.
2. Updated Note 3.
3. Added Note 6.

1720.01

1

WOOD POLES

1. Updated ground rod note.

1736.01

5

SPREAD SPECTRUM RADIO

SHEET 2 –

1. Note 2 deleted, and all references to Note 2 in drawing removed.
2. Remaining notes renumbered.

1743.01

1

**PEDESTALS – PEDESTRIAN PUSHBUTTON POST
(TYPE I)**

1. Updated Note 3.
2. Changed height dimension.
3. Changed threaded flange base thickness.

1743.02

1

PEDESTALS - NORMAL DUTY (TYPE II)

1. Updated Note 3 and Note 4
2. Removed all references to “THREADED FLANGE BASE”.
3. Changed height dimension.

1743.03

1

PEDESTALS - HEAVY DUTY (TYPE III)

1. Changed height dimension.

1. Updated ground rod note.
-

Additional stamped Special Details available for use on the outward-facing Contract Standards and Development Unit website:

TRANSITIONS:

- Transition 1ft 6in CG to 2ft 9in CG 25ft
- Transition 1ft 6in CG to 2ft 9in CG
- Transition 2ft 6in CG to 1ft 6in CG
- Transition 2ft 6in CG to 2ft 9in CG
- Transition 2ft 6in CG to 2ft Paved Shoulder
- Transition 2ft 6in CG to 4ft Paved Shoulder
- Transition 2ft 6in CG to 5ft Paved Shoulder
- Transition 2ft 6in CG to 8x12 or 8x18 Curb
- Transition 2ft 6in CG to Approach Slab CG
- Transition 2ft 6in CG to Expressway Gutter
- Transition 2ft 6in CG to Shoulder Berm Gutter
- Transition 2ft 6in CG to Valley Gutter

CONVERSIONS:

- Convert Box to OTCB
- Convert Box to TB 2GI
- Convert Box to TBJB
- Convert CB DI OTCB or 2GI to JB
- Convert CB or JB to DI or 2GI
- Convert DI or CB to TBJB with Steel Cover
- Convert DI or JB to CB
- Convert OTCB to CB